



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

August 16, 2004

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Serial No.: 10/811,085

Filed : March 25, 2004

For : PERMANENT MAGNET ELECTROMAGNETIC ACTUATOR FOR AN  
ELECTRONIC VALVE ACTUATION SYSTEM OF AN ENGINE

Mail Stop AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

S i r :

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. §§ 1.56, 1.97, and 1.98**

Applicants are submitting this Information Disclosure Statement pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98 to disclose to the U.S. Patent and Trademark Office the patents, publications, applications, and/or other references listed on the enclosed, completed PTO-1449 form. The filing of this Information Disclosure Statement should not be construed as a representation that a search has been made or as an admission that the listed references are prior art for this application. Applicants respectfully request that the listed references be expressly considered during prosecution of the application, and that the references be made of record therein and appear among the "references cited" on any patents issuing therefrom.

**CONTENT OF DISCLOSURE**

This Information Disclosure Statement includes (1) 1 page of PTO-1449 forms, and (2) a legible copy of each foreign and non-patent reference, if any, listed on the form. However,

because this application was filed on or after July 1, 2003, no copies of U.S. patents or published U.S. patent applications are included.

#### **FOREIGN-LANGUAGE REFERENCES**

A concise explanation of the relevance of each listed reference not in the English language follows:

French Patent No. 2812024: This patent purports to disclose a method in which the valve activator comprises two electromagnets (1,2) each comprising a supply reel (5,6) and a magnetic armature (8), located between the electromagnets, connected to a valve driving part (9) against the action of a commutation energy storage spring (13,14). A permanent magnet (22,23) interposed in the body of each electromagnet has its magnetization parallel to the field generated in the body by the corresponding supply reel.

French Patent No. 2812025: This patent purports to disclose a method in which the valve activator comprises an electromagnet (1) comprising a supply reel (2) and a magnetic armature (15) connected to a valve (17) driving part (16) against the action of a commutation energy storage spring (18,19). A permanent magnet (5) interposed in the electromagnet body has its magnetization combined with the field generated in the body by the supply reel.

French Patent No. 2820238: This patent purports to disclose a method in which the electromagnetic driver has a body with a feed coil (3) and a magnetic plate (16) connected to the valve (18) drive unit (17). The drive unit has a spring return (20,21). There is a permanent magnet (6) in the electromagnet body with a field perpendicular to the feed coil field.

#### **TIMING OF DISCLOSURE / FEE INFORMATION**

This Information Disclosure Statement is being filed, to the best of the undersigned's knowledge, either (1) before the

mailing of a first Office action on the merits, or (2) before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. § 1.114. Therefore, in accordance with 37 C.F.R. § 1.97(b), no fee or statement under 37 C.F.R. § 1.97(e) is required.

Please contact the undersigned with any questions or comments regarding this Information Disclosure Statement.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on August 16, 2004.



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